CSC 108
Spring 2010
Dr. Yue-Ling Wong

Pong Game Lab

Step 7

Code After Step 6

```
var increx:int = -5;
var increy:int = Math.random() * 60 - 30;
mc_ball.x = stage.stageWidth;
mc_ball.y = Math.random() * stage.stageHeight;
var score:int = 0;
.
.
.
          mc_ball.x = stage.stageWidth;
          mc_ball.y = Math.random() * stage.stageHeight;
          increx = -5;
          increy = Math.random() * 60 - 30;
```
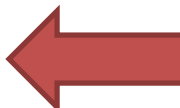
Note the Code Duplication

```
var increx:int = -5;
var increy:int = Math.random() * 60 - 30;
mc_ball.x = stage.stageWidth;
mc_ball.y = Math.random() * stage.stageHeight;
var score:int = 0;
.
.
.
            mc_ball.x = stage.stageWidth;
            mc_ball.y = Math.random() * stage.stageHeight;
            increx = -5;
            increy = Math.random() * 60 - 30;
```

Reduce Code Duplication Using Function

```
var increx:int = -5;
var increy:int = Math.random() * 60 - 30;
mc_ball.x = stage.stageWidth;
mc_ball.y = Math.random() * stage.stageHeight;
var score:int = 0;
.
.
.
        mc_ball.x = stage.stageWidth;
        mc_ball.y = Math.random() * stage.stageHeight;
        increx = -5;
        increy = Math.random() * 60 - 30;
.
.
.
function reset():void
{
    mc_ball.x = stage.stageWidth;
    mc_ball.y = Math.random() * stage.stageHeight;
    increx = -5;
    increy = Math.random() * 60 - 30;
}
```

Define a new function containing those duplicated statements

Reduce Code Duplication Using Function

```
var increx:int = -5;
var increy:int = Math.random() * 60 - 30;
mc_ball.x = stage.stageWidth;
mc_ball.y = Math.random() * stage.stageHeight;
var score:int = 0;
.
.
.

    mc_ball.x = stage.stageWidth;
    mc_ball.y = Math.random() * stage.stageHeight;
    increx = -5;
    increy = Math.random() * 60 - 30;
.
.
.
function reset():void
{
    mc_ball.x = stage.stageWidth;
    mc_ball.y = Math.random() * stage.stageHeight;
    increx = -5;
    increy = Math.random() * 60 - 30;
}
```

Replace with a function call to the new function

Replace with a function call to the new function

Define a new function containing those duplicated statements

Reduce Code Duplication Using Function

```
var increx:int;
var increy:int;
var score:int = 0;
reset();



  .
  .
  .
```

Replace with a function call

```

      reset();


```

Replace with a function call

```
  .
  .
function reset():void
{
    mc_ball.x = stage.stageWidth;
    mc_ball.y = Math.random() * stage.stageHeight;
    increx = -5;
    increy = Math.random() * 60 – 30;
}
```

Define a new function containing those duplicated statements